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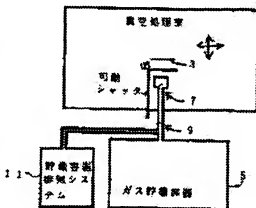
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(54) ATOMIC-LAYER EPITAXY DEVICE

(57)Abstract:

PURPOSE: To highly accurately expose a substrate to gaseous precursor molecules and to form an epitaxial or amorphous adsorption monatomic layer at an extremely low atmospheric temperature by using an oriented outflow molecular line of a precursor gas and a proper gas storage container.

CONSTITUTION: A storage container evacuation system 11 is used for changing gas in a treatment chamber 1. In this case, a gas storage container 5 is closed and all the residual gases in a orifice 9 for limiting the conductance and a capillary array adder 7 is evacuated into the system 11. Then one or plural precursors for forming another monatomic layer or single molecular layer are repeatedly used, together with the same or different precursor. Thus a device to be produced is constructed. Either an automatic or a manual valve can be used for the valve which controls the gas flow rate from a tank in the container 5.



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